

**REMARKS**

Applicants appreciate the Examiner's thorough review of the present application, and respectfully request reconsideration in light of the following remarks.

Claims 1-16 are pending in the application. Claims 7, 8, 10 and 16 have been indicated to include allowable subject matter. Claims 1-6, 9, and 11-15 are rejected as being anticipated by or obvious over Van Aerle (U.S. Patent No. 6,211,992). The claims remain unchanged notwithstanding the Examiner's rejections.

**Rejection of claims 1 and 9 under 35 USC § 102(e) as being anticipated by *Van Aerle***

The present invention is directed to a transfective liquid crystal display comprising: a top plate comprising a transparent electrode; a bottom plate comprising transfective electrodes of **aluminum compound**; a liquid crystal layer sandwiched between the top plate and the bottom plate; and a light source behind the bottom plate. See present claims 1 and 9. As discussed in the specification, especially, page 3, lines 14-16, Applicant utilizes aluminum compound, such as aluminum nitride, to replace chromium or aluminum as the transfective electrodes. The advantages of the inventive arrangement are disclosed in page 2, lines 20-25 of the specification.

Applicants respectfully submit that *Van Aerle* fails to disclose, teach or suggest the above unique arrangement of the present invention.

The *Van Aerle* reference is clearly distinguishable from the present invention, as discussed in the paragraph bridging pages 1-2 of the instant specification. Nevertheless, the Examiner alleged in page 2 of the Office Action that *Van Aerle* discloses transfective electrodes 6 of aluminum compound. Applicants respectfully disagree.

In the *Van Aerle* patent, electrode 6 is made of a reflective material such as aluminum or silver (see column 2, lines 65-67) instead of "aluminum compound" as presently claimed. As well

known in the art, a compound is a chemical substance consisting of atoms or ions of two or more different elements (e.g., aluminum nitride consists of aluminum and nitrogen) that cannot be separated by physical means. See attached Exhibit A. It is noted that an aluminum compound is a new material which has properties different from those of its constituent elements, e.g., aluminum. See also attached Exhibit B.

Therefore, Applicant respectfully submits that *Van Aerle* fails to teach or disclose each and every limitation of independent claims 1 and 9. The 35 USC § 102(e) rejection of claims 1 and 9 is deemed to be in error, and should be withdrawn.

**Rejection of claims 2-6, 11-15 under 35 USC § 103(a) as being unpatentable over *Kaneko***

This rejection is traversed since the *Kaneko* patent does not qualify as a prior-art applicable against the claims of the instant application. See page 3 of the Amendment filed June 18, 2003.

Perhaps, the Examiner intended to reject claims 2-6 and 11-15 under 35 U.S.C. 103(a) as being obvious over *Van Aerle*. If so, such a rejection is also traversed for the reasons advanced with respect to independent claims 1 and 9.

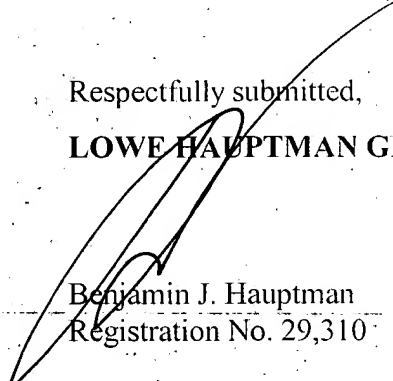
Each of the Examiner's rejections has been traversed. Accordingly, Applicants respectfully submit that all claims are now in condition for allowance. Early and favorable indication of allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

**LOWE HAUPTMAN GILMAN & BERNER, LLP**



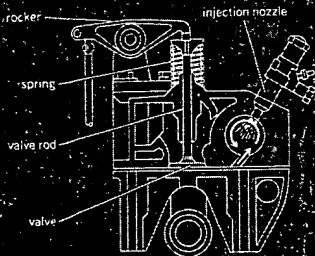
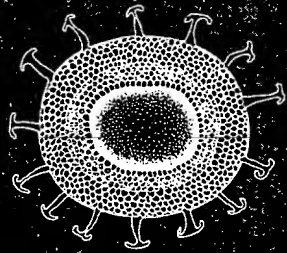
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Exhibit A

**McGraw-Hill**

# Dictionary of Scientific and Technical Terms



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In addition, material has been drawn from the following references: R. E. Huschke, *Glossary of Meteorology*, American Meteorological Society, 1959; *U.S. Air Force Glossary of Standardized Terms*, AF Manual 11-1, vol. 1, 1972; *Communications-Electronics Terminology*, AF Manual 11-1, vol. 3, 1970; W. H. Allen, ed., *Dictionary of Technical Terms for Aerospace Use*, 1st ed., National Aeronautics and Space Administration, 1965; J. M. Gilliland, *Solar-Terrestrial Physics: A Glossary of Terms and Abbreviations*, Royal Aircraft Establishment Technical Report 67158, 1967; *Glossary of Air Traffic Control Terms*, Federal Aviation Agency; *A Glossary of Range Terminology*, White Sands Missile Range, New Mexico, National Bureau of Standards, AD 467-424; *A DOD Glossary of Mapping, Charting and Geodetic Terms*, 1st ed., Department of Defense, 1967; P. W. Thrush, comp. and ed., *A Dictionary of Mining, Mineral, and Related Terms*, Bureau of Mines, 1968; *Nuclear Terms: A Glossary*, 2d ed., Atomic Energy Commission; F. Casey, ed., *Compilation of Terms in Information Sciences Technology*, Federal Council for Science and Technology, 1970; *Glossary of Stinfo Terminology*, Office of Aerospace Research, U.S. Air Force, 1963; *Naval Dictionary of Electronic, Technical, and Imperative Terms*, Bureau of Naval Personnel, 1962; *ADP Glossary*, Department of the Navy, NAVSO P-3097.

#### McGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS

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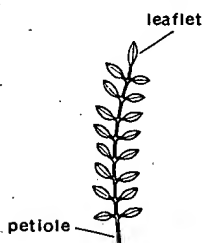
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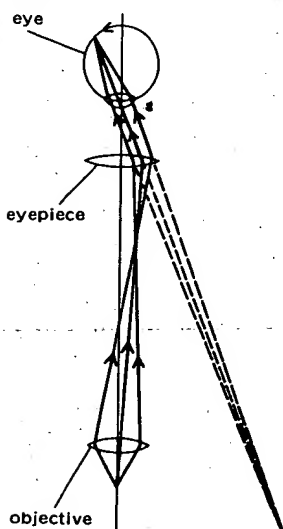
1. Science—Dictionaries. 2. Technology—Dictionaries. I. Lapedes, Daniel N., ed. II. Title: Dictionary of scientific and technical terms.  
Q123.M15 503 74-16193  
ISBN 0-07-045257-1

# COMPOUND LEAF



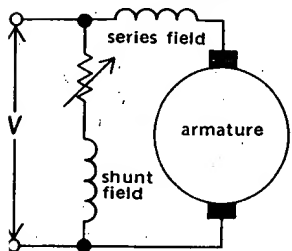
Odd-pinnately compound leaf.

# COMPOUND MICROSCOPE



Compound microscope diagram.  
from F. A. Jenkins and H. E. White, *Fundamentals of Optics*, 1 ed., McGraw-Hill, 1957)

# COMPOUND MOTOR



Connection of a compound motor.

# COMPOUND TUBULAR-ACINOUS GLAND



Diagram of the distal secretory units of a compound tubular-acinous gland.

more low-pass, high-pass, band-pass, or band-elimination filters.

**composition** [CHEM] The elements or compounds making up a material or produced from it by analysis. [GRAPHICS] The act of composing or combining type for printing, either by hand or by machine. [SCI TECH] The elements or compounds making up a material or produced from it by analysis.

**compositional maturity** [GEOL] Concept of a type of maturity in sedimentary rocks in which a sediment approaches the compositional end product to which formative processes drive it.

**composition board** [MATER] A sheet product composed of vegetable fibers mechanically or chemically formed into a pulp, which is rolled and pressed. Also known as compo board.

**composition diagram** [CHEM ENG] Graphical plots to show the solvent-solute concentration relationships during various stages of extraction operations (leaching, or solid-liquid extraction; and liquid-liquid extraction).

**composition face** See composition surface.

**composition metal** [MET] A cast copper alloy having a composition of more than 80% copper, with tin, zinc, and lead.

**composition of forces** [MECH] The determination of a force whose effect is the same as that of two or more given forces acting simultaneously; all forces are considered acting at the same point.

**composition of vectors** See addition of vectors.

**composition of velocities law** [MECH] A law relating the velocities of an object in two reference frames which are moving relative to each other with a specified velocity.

**composition plane** [CRYSTAL] A planar composition surface in a crystal uniting two individuals of a contact twin.

**composition resistor** See carbon resistor.

**composition surface** [CRYSTAL] The surface uniting individuals of a crystal twin; may or may not be planar. Also known as composition face.

**compost** [MATER] A mixture of decaying organic matter used to fertilize and condition the soil.

**compound** [CHEM] A substance whose molecules consist of unlike atoms and whose constituents cannot be separated by physical means. Also known as chemical compound.

**compound acinous gland** [ANAT] A structure with spherical secretory units connected to many ducts that empty into a common duct.

**compound alluvial fan** [GEOL] Structure formed by the lateral growth and merger of fans made by neighboring streams.

**compound compact** [MET] A powder compact made from a mixture of metals, with each particle retaining its original composition.

**compound cryosar** [ELECTR] A cryosar consisting of two normal cryosars with different electrical characteristics in series.

**compound curve** [MATH] A curve made up of two arcs of differing radii whose centers are on the same side, connected by a common tangent; used to lay out railroad curves because curvature goes from nothing to a maximum gradually, and vice versa.

**compound die** [MET] A die designed to perform more than one operation on the work with each stroke of the press.

**compound elastic scattering** [NUC PHYS] Scattering in which the final state is the same as the initial state, but there is an intermediate state with the colliding systems amalgamating to form a compound system.

**compound engine** [MECH ENG] A multicylinder-type displacement engine, using steam, air, or hot gas, where expansion proceeds successively (sequentially).

**compound eye** [INV ZOO] An eye typical of crustaceans, insects, centipedes, and horseshoe crabs, constructed of many functionally independent photoreceptor units (ommatidia) separated by pigment cells.

**compound generator** [ELEC] A direct-current generator which has both a series field winding and a shunt field winding, both on the main poles with the shunt field winding on the outside.

**compound gland** [ANAT] A secretory structure with many ducts.

**compounding** [MECH ENG] The series placing of cylinders in

an engine (such as steam) for greater ratios of expansion and consequent improved engine economy.

**compound leaf** [BOT] A type of leaf with the blade divided into two or more separate leaflets such as the rose.

**compound lens** [OPTICS] 1. A combination of two or more lenses in which the second surface of one lens has the same radius as the first surface of the following lens, and the two lenses are cemented together. Also known as cemented lens. 2. Any optical system consisting of more than one element, even when they are not in contact.

**compound lever** [MECH ENG] A train of levers in which motion or force is transmitted from the arm of one lever to that of the next.

**compound microscope** [OPTICS] A microscope which utilizes two lenses or lens systems; one lens forms an enlarged image of the object, and the second magnifies the image formed by the first.

**compound modulation** See multiple modulation.

**compound motor** [ELEC] A direct-current motor with two separate field windings, one connected in parallel with the armature circuit, the other connected in series with the armature circuit.

**compound nucleus** [NUC PHYS] An intermediate state in a nuclear reaction in which the incident particle combines with the target nucleus and its energy is shared among all the nucleons of the system.

**compound number** [MATH] A quantity which is expressed as the sum of two or more quantities in terms of different units, for example, 3 feet 10 inches, or 2 pounds 5 ounces.

**compound ripple marks** [GEOL] Complex ripple marks of great diversity which originate by simultaneous interference of wave oscillation with current action.

**compound screw** [DES ENG] A screw having different or opposite pitches on opposite ends of the shank.

**compound shaft** [MIN ENG] A shaft in which the upper stage is often a vertical shaft, while the lower stage, or stages, may be inclined and driven into the deposit.

**compound sugar** See oligosaccharide.

**compound tubular-acinous gland** [ANAT] A structure in which the secreting units are simple tubes with acinous side chambers and all are connected to a common duct.

**compound tubular gland** [ANAT] A structure with branched ducts between the surface opening and the secreting portion.

**compound twins** [CRYSTAL] Individuals of one mineral group united in accordance with two or more different twin laws.

**compound valley glacier** [HYD] A glacier composed of several ice streams emanating from different tributary valleys.

**compound volcano** [GEOL] 1. A volcano consisting of a complex of two or more cones. 2. A volcano with an associated volcanic dome.

**compound wave** [FL MECH] A plane wave of finite amplitude in which neither the sum of the velocity potential and the component of velocity in the direction of wave motion, nor the difference of these two quantities, is constant.

**compound winding** [ELEC] A winding that is a combination of series and shunt winding.

**compregnate** [ENG] Compression of materials into a dense, hard substance with the aid of heat.

**compressed air** [MECH] Air whose density is increased by subjecting it to a pressure greater than atmospheric pressure.

**compressed-air blasting** [MIN ENG] A method for breaking down coal by compressed-air power.

**compressed-air diving** [ENG] Any form of diving in which air is supplied under high pressure to prevent lung collapse.

**compressed-air illness** See caisson disease.

**compressed-air loudspeaker** [ENG ACOUS] A loudspeaker having an electrically actuated valve that modulates a stream of compressed air.

**compressed-air power** [MECH ENG] The power delivered by the pressure of compressed air as it expands, utilized in tools such as drills, in hoists, grinders, riveters, diggers, pile drivers, motors, locomotives, and mine ventilating systems.

**compressibility** [MECH] The property of a substance capable of being reduced in volume by application of pressure; quantitatively, the reciprocal of the bulk modulus.

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